

10/025,550
H07-138280M/STS

REMARKS

Claims 1-4, 7-8, 27 and 36-38 are all the claims presently pending in the application. Claims 34-35 and 39 have been canceled. Claims 1, 2, 27 and 36-38 have been amended to further define the invention.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Applicant notes that none of the claims are rejected on prior art grounds. Therefore, the Application would presumably be placed in condition for allowance assuming that the alleged informalities are addressed.

Claims 1-4, 7-8, 27 and 34-39 stand rejected under 35 U.S.C. 112, second paragraph as allegedly failing to particularly point out and distinctly claim the subject matter regarded as the invention.

Claims 1-4, 7-8, 27 and 34-39 stand rejected under 35 U.S.C. § 112, first paragraph as allegedly failing to comply with the written description requirement.

These rejections are respectfully traversed in view of the following discussion.

I. THE CLAIMED INVENTION

Applicant's invention is directed to an image forming method which includes developing an electrostatic latent image formed on an image carrier with a developing device into a toner image using toners, transferring the toner image onto a recording medium, and fixing the toner image transferred onto the recording medium to thereby form a recorded image on a recording sheet.

In the claimed invention, a peripheral speed ratio ($S1 = Vm1 / Vp$) between the peripheral speed ($Vm1$) of the first developing roller and the peripheral speed (Vp) of the image carrier is set in the range of 0.8 - 2.0, and a peripheral speed ratio ($S2 = Vm2 / Vp$) between the peripheral

10/025,550
H07-138280M/STS

speed (V_{m2}) of the second developing roller and the peripheral speed (V_p) of the image carrier is set in the range of 1.05 - 2.0. In addition, the shape coefficients SF1, SF2 of the toners of the developing agent respectively satisfying the following conditions: $120 \leq SF1 \leq 170$ and $110 \leq SF2 \leq 130$.

Importantly, the method includes controlling a stress applied to the developing agent between the first and second developing rollers and a developing agent distributing member, by selecting a shape coefficient SF2 of toner particles in the toners to be within a predetermined range to restrict an occurrence of photographic fog.

The Application explains that by selecting the shape coefficient SF2, the claimed invention can control a stress applied to the developing agent between the first and second developing rollers and a developing agent distributing member formed between the first and second developing rollers, and an occurrence of a photographic fog can be restricted (Application at page 19, line 21-page 21, line 25; Figure 7). Thus, the claimed invention results in a better quality image than conventional methods.

II. THE 35 USC §112, SECOND PARAGRAPH REJECTION

The Examiner alleges that claims 1-4, 7-8, 27 and 34-39 fail to comply with the written description requirement under 35 U.S.C. § 112, first paragraph. Applicant would point out, however, that the claims have been amended to address the Examiner's concerns.

Specifically, claims 1, 2, 36 and 38 have been amended to replace "*consisting mainly of said toners and magnetic carriers*" with "*consisting mainly of toners and magnetic carriers*". Claims 1, 2, 36, 38 and 39 have also been amended to replace "*a developing agent distributing member*" with "*said developing agent distributing member*".

Further, claims 1, 2 and 38 have been amended to delete the phrase "*which comprises a continuous sheet*", and to replace the phrase "*said two-component magnetic developing agent*" with "*said two-component developing agent*".

Further, claim 36 has been amended to replace

"scraping said developing agent including said toners having said shape

10/025,550
H07-138280M/STS

coefficients SF1, SF2 from said first developing roller using a scraper, said scraper delivering said scraped developing agent to a stirring member",

with

"scraping said developing agent including said toners having said shape coefficients SF1, SF2 from said first developing roller using a scraper, said scraper

delivering said toners supplied from a toner feed roller and said scraped developing agent onto two screw-shaped stirring members disposed in a lower portion of said developing system to a stirring member;"

Further, Applicant notes that claim 37 has been amended to recite "*controlling an effectiveness of said fur brush in said center feed developing system in cleaning said toners from said photosensitive body by selecting said shape coefficient SF1 of said toners to be within said range from 120 to 170 and said shape coefficient SF2 to be within said range from 110 to 130*".

In view of the foregoing, Applicant would respectfully submit that these claims are not indefinite. Therefore, the Examiner is respectfully requested to withdraw this rejection.

III. THE 35 USC §112, FIRST PARAGRAPH REJECTION

The Examiner alleges that claims 1-4, 7-8, 27 and 36-38 fail to comply with the written description requirement under 35 U.S.C. § 112, first paragraph. Applicant would submit, however, that these claims are clearly enabled by the specification.

Specifically, as noted above, claims 1, 2 and 38 have been amended to delete the phrase "*which comprises a continuous sheet*".

In addition, claim 36 has been amended to recite "*wherein said first and second developing rollers are rotatable in mutually opposite directions, wherein the moving direction of said first developing roller is opposite to the moving direction of said image carrier in a developing area, and a peripheral speed ratio ($S1 = Vm1 / Vp$) between the peripheral speed*

10/025,550
H07-138280M/STS

(Vm1) of said first developing roller and the peripheral speed (Vp) of said image carrier is set in the range of 0.8 - 2.0, and wherein the moving direction of said second developing roller is the same as the moving direction of said image carrier in a developing area, and a peripheral speed ratio ($S2 = Vm2 / Vp$) between the peripheral speed (Vm2) of said second developing roller and the peripheral speed (Vp) of said image carrier is set in the range of 1.05 - 2.0", as suggested by the Examiner.

In addition, as noted above, claim 36 has been amended to recite:

*"scraping said developing agent including said toners having said shape coefficients SF1, SF2 from said first developing roller using a scraper; ~~said~~
~~scraper~~
delivering said toners supplied from a toner feed roller and said scraped developing agent onto two screw-shaped stirring members disposed in a lower portion of said developing system to a stirring member;"*

Further, claim 36 has been amended to recite *"removing said toners having said shape coefficients SF1, SF2 which remain on said photosensitive body by using a fur brush which is in contact with said photosensitive body", and as noted above claim 37 has been amended to recite "controlling an effectiveness of said fur brush in said center feed developing system in cleaning said toners from said photosensitive body by selecting said shape coefficient SF1 of said toners to be within said range from 120 to 170 and said shape coefficient SF2 to be within said range from 110 to 130".*

In view of the foregoing, Applicant would respectfully submit that these claims fully comply with the written description requirement. Therefore, the Examiner is respectfully requested to withdraw this rejection.

III. FORMAL MATTERS AND CONCLUSION

The Examiner alleges that claim 27 is a substantial duplicate of claim 38. Applicant notes that to address the Examiner's concerns, claim 27 has been amended to depend from claim

10/025,550
H07-138280M/STS

3 which recites "*wherein the peripheral speed ratio S1 is in a range from 0.9 to 1.9*". This limitation is not included in claim 38 and therefore, Applicant respectfully submits that claim 27 is not a substantial duplicate of claim 38.

An Information Disclosure Statement is submitted herewith.

In view of the foregoing, Applicant submits that claims 1-4, 7-8, 27 and 36-38, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Date: 2/28/06

Respectfully Submitted,



Phillip E. Miller, Esq.
Registration No. 46,060

McGinn IP Law Group, PLLC
8321 Old Courthouse Road, Suite 200
Vienna, VA 22182-3817
(703) 761-4100
Customer No. 21254

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that the foregoing Amendment and Information Disclosures Statement were filed by facsimile with the United States Patent and Trademark Office, Examiner Janis Dote, Group Art Unit # 1756 at fax number (571) 273-8300 this 28th day of February, 2006.



Phillip E. Miller